UTAH STATE IMPLEMENTATION PLAN

EMISSION LIMITATIONS

SECTION IX PART H

Adopted by the Air Quality Board
February 5, 1997

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IX.H.1. Emission Limitations and Operating Practices (Utah County) (Dated 24 September 1990 and updated June 28, 1991, February 5, 1997)

IX.H.1.a General Requirements

1.a.A Stack testing to show compliance with the emission limitations for the sources in this appendix shall be performed in accordance with 40 CFR 60, Appendix A; 40 CFR 51 Appendix M; and Subsection R307-1-3.2.5, Utah Air Conservation Rules (UACR). The back half condensibles are required for inventory purposes and shall be determined using the method specified by the Executive Secretary. If after two stack tests are conducted at a particular emissions point under this SIP, it is shown that because of the reliability of pollution control equipment, constant emissions or other appropriate reasons, the stack testing frequency prescribed by these regulations is more frequent than necessary to determine the quantity of emissions, the Utah Air Conservation Committee may reduce the stack testing frequency of any particular emission point in a given year. The following test methods shall be used for the indicated air contaminants:

PM_{10} For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a plus the back half condensibles using method 202 (when promulgated by the EPA) or by the method specified by the Executive Secretary.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, 5e, or other as approved by the Executive Secretary as appropriate, plus back half condensibles using method 202 (when promulgated by the EPA) or by the method specified by the Executive Secretary. All particulate captured in the back half shall be considered PM_{10}.

The PM_{10} captured in the front half, as determined by the appropriate method acceptable to the Executive Secretary, shall be considered for compliance purposes.

SO_2 Appendix A, Method 6, 6A, 6B or 6C

NO_x Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E

Sample Location Appendix A, Method 1

Vol flow rate Appendix A, Method 2

Calculations To determine mass emission rates (lbs/hr, etc.), the pollutant concentration as determined by the appropriate methods above shall be multiplied by the

volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

Notification of the test date shall be provided at least 45 days prior to the test. A pretest conference shall be held if directed by the Executive Secretary. It shall be held at least 30 days prior to the test between the owner/operator, the tester, and the Executive Secretary. The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1 and Occupational Safety and Health Administration (OSHA) approvable access shall be provided to the test location. The production rate during all compliance testing shall be no less than 90% of the production rate at which the facility will normally be operated.

The limitations for the sources listed in Section IX.H.1.b. are expressed in terms of PM_{10}, SO_2 and NO_x. The PM_{10} limitations have been converted to PM_{10} from TSP based upon estimated, but unsubstantiated emissions factors. The emissions data used in this Section are based upon the best data available. Nevertheless, the SO_2 and NO_x emissions limitations are also estimated, but are unsubstantiated calculations, conversion factors and emissions factors. SO_2 and NO_x historically have not been measured in specific stacks resulting in a sparsity of reliable data (i.e., the SO_2 and NO_x emissions inventory and resulting emissions limitations may be too high or low). After this PM_{10} SIP becomes effective and at the first regularly scheduled compliance test in accordance with Sections 3.2.5 or 3.2.6, UACR, the emissions limitations as stated herein will be verified as necessary, and readjusted with the approval of the Executive Secretary. The emissions limitations for PM_{10}, SO_2 and NO_x will be adjusted appropriately once the relationship between the old emissions inventory calculations, stack tests and emissions factors and the new test results are understood and verified. Adjustments may be made, provided the adjustments do not adversely affect achieving compliance with the National Ambient Air Quality Standards (NAAQS).

An exceedance of the mass emissions rates (lbs/hr.), concentration limitations (grains/dscf), or both for a single point source during compliance testing shall be considered a single violation during the test period. If an adjustment in the relationship between the TSP base limitations and PM_{10} limitations should be necessary at the first compliance test, individual stack test results will not be considered in violation of the PM_{10} particulate emission limitation if the TSP base limitation is not exceeded. The base TSP limitation is the TSP limitation from which the PM_{10} particulate limitation was calculated as per the SIP Technical Support Document or as indicated in this Section.

Following the final establishment of the PM_{10} particulate, SO_2, and NO_x limitations, the new limitations will be used for enforcement where applicable.

1.a.B Visible emissions shall be as follows except as otherwise designated in specific source subsections: Baghouse applications shall not exceed 10% opacity; scrubber and ESP applications shall not exceed 15% opacity; combustion sources without control facilities shall not exceed 10% opacity; and fugitive emissions shall not exceed 15% opacity; fugitive dust and all other sources shall not exceed 20% opacity.

1.a.C Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. For intermittent sources and mobil source emissions opacity observations shall be conducted using a modified method 9 (not all 24 readings for a six minute period required).

1.a.D Compliance with the annual limitations shall be determined on a rolling 12 month total except where specifically exempted or otherwise provided for. Based on the first day of each month a new 12-month total shall be calculated using the previous 12 months.

1.a.E Records of consumption/production shall be kept for all periods when the plant is in operation. Records of consumption/production shall be made available to the Executive Secretary upon request, and shall include a period of two years ending with the date of the request.

1.a.F This regulation shall replace all language pertaining to particulate, SO_2 and NO_x in approval orders for the listed sources issued prior to the effective date of Section IX, Part H. All language which pertains to other air contaminants shall remain in effect.

1.a.G All installations and facilities authorized by this regulation shall be adequately and properly maintained.

1.a.H Any future modifications to the equipment covered in this regulation must also be approved in accordance with Section R307-1-3.1, UACR.

1.a.I All unpaved operational areas which are used by mobile equipment shall be water sprayed and/or chemically treated to reduce fugitive dust. Control is required at all times (24 hours per day every day) for the duration of the project/operation. The application rate of water shall be a minimum of 0.25 gallons per square yard. Application shall be made at least once every two hours during all times the installation is in use unless daily rainfall exceeds .10 of an inch or the road is in a muddy condition or if it is covered with snow or if the ambient temperature falls below freezing or if the surfaces are in a moist/damp condition. If chemical treatment is to be used, the plan must be approved by the Executive Secretary. Records of water treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:

A. Date
B. Number of treatments made, dilution ratio, and quantity
C. Rainfall received, if any, and approximate amount

D. Time of day treatments were made

Records of treatment shall be made available to the Executive Secretary upon request and shall include a period of two years ending with the date of the request.

1.a.J Annual emissions referred to at the end of each subsections of Section IX, Part H are not to be used for purposes of determining compliance unless otherwise specified in source specific sections. No modifications to these sources, which would result in an increase of allowable emissions, shall be approved without an analysis of the effect on the PM-10 SIP. These annual emissions shall be used in the determinations required for off-set credit, PSD applicability, and nonattainment area major source reviews. These emissions are normally what the source is actually emitting annually.

1.a.K "Test if directed," as used in specific source subsection, shall mean test if directed by the Executive Secretary.

1.a.L The definitions contained in Section R307-1-1, UACR (Foreword and Definitions), shall apply to Section IX, Part H.

IX.H.1.b. Particulate Emission Limitations (company specific)

1.b.A BONNEVILLE PACIFIC CORP. (LEHI COGENERATION)

1. Affected Equipment:

   A. Delaval engine, R4V16, 7,000 kW output (engine 1000)
   B. Delaval engine, R5V12, 6,650 kW output (engine 2000)
   C. Delaval engine, R5L6, 3,300 kW output (engine 3000)
   D. Caterpillar model G399 emergency natural gas generator, 650 Kw output
   E. Standby boiler, 21.0 X 10^6 BTU/HR, natural gas fired

2. Emission Limitations and Stack Testing:

   Emissions to the atmosphere from the indicated emission point shall not exceed the following rates and concentrations:

   A. Engine 1000 (7,000 kW):

      NO_x 53.9 lb/hr 3.49 gram/kWhr

   B. Engine 2000 (6,650 Kw):

      NO_x 51.2 lb/hr 3.49 gram/kWhr

   C. Engine 3000 (3,300 kW):

      NO_x 25.4 lb/hr 3.49 gram/kWhr

   D. 650 kW emergency generator:

      NO_x 23.3 lb/hr 16.0 gram/kWhr

   E. For the total emissions of the entire plant (engine 1000, engine 2000, engine 3000, 650 kW generator, and the standby boiler) including start-up emissions:

      NO_x emissions shall not exceed 249.9 tons for any 12 month period

   Stack testing to show compliance with the above emission limitations shall be performed as follows: The Three Dual Fuel Engines (Engines 1000, 2000, and 3000) have been stack tested on August 4, 1989. They shall however be retested every three years following promulgation of this regulation. The 650 kW emergency generator and the standby boiler shall be tested only if directed by the Executive Secretary.

To determine compliance with the 12 month period NO_x limit a continuous emission monitor shall be installed in the common exhaust stack for the three engines. The monitor shall measure emissions during all periods of operation including start-up and shut-down unless the monitor is malfunctioning. A detailed monitoring plan including location, type of monitor, quality assurance procedures, minimum data collection, formula for estimating exhaust flow rate, etc. shall be submitted to the Executive Secretary for approval within 30 days of the promulgation of this regulation. The Monitor shall be installed not later than November 1, 1991, and be operated and data recorded as specified in Subsection R307-1-4.6, UACR and 40 CRR 60, appendix B, Specification 2. Emissions of NO_x from the emergency generator shall also be included in the compliance demonstration for the annual emission limit. The hours of operation for the emergency generator shall be recorded from an hours meter and emissions of 23.28 lbs NO_x/hr shall be recorded for each hour of operation of the emergency generator.

3. Visible Emissions:

   Visible emissions from any point or fugitive emission source associated with this installation or control facilities shall not exceed the following values for each engine:

   A. During normal dual fuel operation - 10% opacity
   B. During the first 15 minutes of start-up - no opacity limit
   C. During start-up for the 18 minute period immediately following the 15 minute period - 60% opacity
   D. During start-up for the second 18 minute period - 20% opacity
   E. During shut-down for the first 12 minute period - 40% opacity
   F. During shut-down for the second 12 minute period - 20% opacity

4. Production Limitations:

   The following production limit shall not be exceeded without prior approval in accordance with Subsection R307-1-3.1, UACR:

   Total production of electricity - 65.0 X 10^6 kW-hr per 12 month period

5. Operating Parameters:

   The following operating parameters shall be maintained within the indicated ranges during normal operations, except during the plant capacity demonstration test periods during July and August each year:

   Engine 1000 (V-16 7000 kW)

   A. Intake manifold pressure - 37.50 to 47.50 inches Hg

B. Cylinder exhaust temperature for each cyl - 850 to 1050°F
C. Pilot oil rack setting for each cyl - 20.5 to 25.0 mm

Engine 2000 (V-12 6650 kW)

A. Intake manifold pressure - 42.00 to 55.00 inches Hg
B. Cylinder exhaust temperature for each cyl - 740 to 950°F
C. Pilot oil rack setting for each cyl - 20.5 to 25.5 mm

Engine 3000 (L-6 3300 kW)

A. Intake manifold pressure - 40.50 to 52.00 inches Hg
B. Cylinder exhaust temperature for each cyl - 740 to 950°F
C. Pilot oil rack setting for each cyl - 8.0 to 10.5 mm

The engines shall be monitored with equipment located such that an inspector can at any time safely read the output. The accuracy of the equipment used to monitor the engines shall be calibrated to the following values:

Intake manifold pressure - plus or minus 0.5 in. Hg
Cylinder exhaust temperature - plus or minus 5.0° F
Pilot oil rack setting for each cyl - plus or minus 1.0 mm.
Total production of electricity - plus or minus 170 kW/hr

All instruments shall be calibrated against a primary standard at least once every year. The primary standard shall be specified by the Executive Secretary.

6. Fuel Requirements:

A. The owner/operator shall use only natural gas as a primary fuel and number 2 fuel oil or better as a pilot fuel in the engines. During the start-up or shut-down of the engines, the lbs/hr emission limitations of condition number two shall not apply. However, the emissions of start-up shall be monitored by the continuous emission monitor and included in the demonstration of compliance with the annual NO_x emission limitation of that condition. If any other fuel or any other mixture is to be used, an approval order shall be required in accordance with Subsection R307-1-3.1, UACR.

B. The owner/operator shall use only natural gas or propane as fuel in the 650 kW generator and the standby boiler. If any other fuel is to be used, an approval order shall be required in accordance with Subsection R307-1-3.1, UACR.

C. The sulfur content of any fuel oil burned shall not exceed 0.450 percent by weight as determined by ASTM Method D-12-66. The sulfur content shall be tested if directed by the Executive Secretary.

7. Fugitive Dust Requirements:

   All plant roads and other operational areas shall be paved.

8. Annual Emissions:

   Bonneville Pacific Corporation shall be limited to 249.9 tpy of NO_x emission limitation until such time as it completes all necessary requirements to modify an approval order in accordance with Subsection R307-1-3.1. The SIP allowable emissions have been set higher than the current permit levels in anticipation that approval can be given for the requested emission increase for which a Notice of Intent was filed prior to the initiation of this SIP. The annual emissions of this SIP should in no way be construed as approval of the NOI nor should these annual emissions in any way be considered in the decisions regarding approval of Bonneville Pacific's requested emission increase.

   Annual emissions for this source for SIP purposes (the entire plant) are calculated at 1.92 tons/yr for PM_{10}, 6.44 tons/yr for SO_2, and 296.5 tons/yr for NO_x.

1.b.B BRIGHAM YOUNG UNIVERSITY (Heating Plant)

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-0783-91 (10/18/91) - changes to central heating plant

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

13.6 tpy PM10, 217.1 tpy SO2, and 157.3 tpy NOx

1.b.C FIFTEEN FIFTY ASSOCIATES, LLC

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-0925-96 (9/24/96) - Approval for Banked Emission Credits - Consolidated Red E Mix in Orem, Utah

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

12.6 tpy PM10, 2.6 tpy SO2, and 24.5 tpy NOx

1.b.D A.P. GREEN

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-1046-94 (12/7/94) - change of ownership

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

20.6 tpy PM10, 18.2 tpy SO2, and 95.8 tpy NOx (134.47 tpy total)

1.b.E GENEVA ROCK PRODUCTS, OREM (Asphalt Plant, Concrete Batch Plant)

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-0333-92 (4/2/92) - installation of concrete batch plant

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

43.2 tpy PM10, 10.2 tpy SO2, and 34.1 tpy NOx

1.b.F GENEVA STEEL

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

E-0577-93 (7/7/93)	Mold Foundry Ramming Sand Bin Dust Collection
E-1138-93 (1/3/94)	Hot Metal De-sulfurization Station Baghouse
E-0732-94 (9/6/94)	Bypass/Bleeder Flare System
E-1160-95 (12/10/95)	Coal Mixer Building Baghouse
E-0023-96 (1/11/96)	Modify Stack Testing Frequency for Primary Mill Hot Scarfing Machine Facility
E-0287-96 (3/13/96)	Sinter Plant Baghouse
E-0288-96 (3/13/96)	Changes for Ladel Metallurgy Facility
E-0373-96 (4/3/96)	Modification of the Sulfur Removal Unit AO
E-0591-96 (6/7/96)	Modification of Q-BOP Approval Order (BAQE-367-91) dated June 4, 1991
E-0933-96 (9/24/96)	Misc. Backup Generators at Geneva Steel
E-0048-97 (1/13/97)	Installation of a Fume Supression System and Correction of Emission Values, Changes to Cupola AO
E-0089-97 (2/5/97)	General A.O. to Cover SIP Issues, 1997

Editorial note: The General A.O. will include (by reference) the following appendicies:

- Standard Environmental Operating Practices at Geneva Steel (SEOP) - practices to control emissions from the coke oven batteries, blast furnaces, sinter plant and other facilities;

- Coke Oven Inspection Procedures at Geneva Steel (COIP) - procedures for determining compliance with the standards for charging, the door areas, the topside port lids, and the offtake system of the coke oven batteries, including the inspection data sheets;

- Visible Emission Compliance Evaluation Procedures at Geneva Steel (VECEP) - manual procedures that shall be used in performing visible emission observations of stack, roof monitors, and fugitive emissions from buildings and other sources (GAO § 10);

- PM10/TSP Factors for Estimating Particulate Emissions at Geneva Steel - relationship of particulate matter - 10 micron (PM10) and total suspended particulate (TSP) for stack testing evaluation and emission inventory determination at Geneva Steel;

- Emission Inventory Spreadsheets (EIS) - spreadsheets which contain emission factors and are used to calculate and demonstrate compliance with the annual emission

limitation. The EIS includes the Post SIP Inventory, Base Year 1988 Inventory, and Periodic Rolling 12-Month Total Inventory.

- Protocol for Maintaining and Modifying PM10 Emission Inventories at Geneva Steel (PEI) - a method for upkeep and revision to the emission spreadsheets (EIS) which covers factor changes, acceptance by DAQ, revision and maintenance of computer accessible copies, and location of these copies (DAQ and Geneva).

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

7,435 tpy PM10 + SO2 + NOx.

This allowable annual emissions total shall represent a plantwide cap for any 12-month rolling period. Compliance shall be determined by the Emission Inventory Spreadsheets (EIS).

1.b.G HECKETT ENGINEERING (HARSCO Corp.)

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-1097-93 (12/13/93) - slag processing facility

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

88.8 tpy PM10, 3.75 tpy SO2, and 39.5 tpy NOx

1.b.H LA ROCHE INDUSTRIES, INC.

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-0688-92 (7/21/92) - NOx abatement

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

111. tpy PM10, 0.02 tpy SO2, and 228. tpy NOx

1.b.I PACIFIC STATES CAST IRON PIPE COMPANY

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP and the Utah CO SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-0909-96 (9/25/96) - Cupola CO Burners

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10 and CO, and which may include banked emission credits, are as follows:

10.4 tpy PM10, 18.0 tpy SO2, and 63.5 tpy NOx

1.b.J PROVO CITY POWER

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-0572-96 (5/30/96) - Modification of Approval Order DAQE-494-95

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

14.5 tpy PM10, 4.0 tpy SO2, and 254.0 tpy NOx

1.b.K REILLY INDUSTRIES

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-1190-95 (12/20/95) - Evaporator Unit

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

0.51 tpy PM10, 4.34 tpy SO2, and 13.47 tpy NOx

1.b.L SPRINGVILLE CITY POWER

1.b.L.1. Emission Limitations and Stack Testing:

Emissions to the atmosphere from the indicated emission point shall not exceed the following rates and concentrations:

For either of the two 9,750 horsepower Transamerica Delaval DSRV-6-4 dual fuel reciprocating engines:

NO_x	79.5 lbs/hr	3.70 gram/HP-hr (4.96 g/Kw-hr)

Stack testing to show compliance with the above emission limitations shall be performed (for both engines) within 180 days after promulgation of this regulation, and they shall be retested every 3 years.

1.b.L.2. Visible Emissions:

With the exception of an initial start up period of 15 minutes, visible emissions from any point or stationary fugitive emission source associated with the installation or control facilities shall not exceed 10% opacity.

1.b.L.3. Production Limitations:

The following production limits shall not be exceeded without prior approval in accordance with Subsection R307-1-3.1, UACR:

A. Production of 43,000 MW-hours per year

Energy production shall be determined by reading and recording Watt-Hour meters which shall be accurate to within 10 MW-hours. The records shall be kept on a daily basis.

1.b.L.4. Operating Parameters:

The following operating parameters shall be maintained within the indicated ranges:

A. Combustion air manifold pressure - shall be no less than ((% engine load - 35.46) / (1.81)). The pressure is measured in inches Hg, and the allowable variation is plus or minus 0.1 inch.

B. Pilot oil injection rack setting - shall be 6.25 mm, plus or minus 0.5 mm.

C. Cylinder exhaust temperature - shall be maintained at ((1054 -% engine load) / (1.11)) in degrees F for each cylinder. The allowable variation is plus or minus 125° F. This applies to the load range of 50 to 100 percent only.

They shall be monitored with equipment located such that an inspector can at any time safely read the output. All instruments shall be calibrated against a primary standard at least once every 90 days. The primary standard shall be specified by the Executive Secretary.

1.b.L.5. Fuel Requirements:

A. The owner/operator shall use only natural gas as the primary fuel and number 2 fuel oil as the pilot fuel in the two dual fuel engines. If any other fuel is to be used, an approval order shall be required in accordance with Subsection R307-1-3.1, UACR. The sulfur content of any fuel oil burned shall not exceed 0.45 percent by weight sulfur as determined by ASTM Method D-4294-89. The sulfur content shall be tested if directed by the Executive Secretary.

B. The two engines shall only be operated in the dual fuel mode, and the amount of diesel fuel in the mixture shall not exceed that level indicated by the pilot oil injection rack setting. Under no circumstances (other than an initial start up period of 15 minutes) may either engine be operated using straight diesel fuel.

C. On the first day of each month a new 12-month rolling total emissions inventory shall be compiled. The inventory shall be based on the previous 12-month rolling total operation and the appropriate emissions factors for the engines. If the NO_x emissions exceed 200 tpy for the previous 12 months, the source shall submit a report of the emissions to the Executive Secretary within 30 days. Within 90 days the source shall submit to the Executive Secretary for approval a plan with proposed specifications for the installation, calibration, and maintenance of a continuous emissions monitoring system (CEMS) for NO_x. The CEM shall be on line within 12 months following the approval of the plan.

6. Annual Emissions:

Annual emissions for this source (the entire plant) are hereby established at 1.30 tons/yr for particulate, 1.30 tons/yr for PM_{10}, 3.20 tons/yr for SO_2, and 235.1 tons/yr for NO_x.

1.b.M UTAH POWER & LIGHT (HALE PLANT)

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-0807-94 (9/23/94) - Banking Order, preserving: 11.9 tpy PM10, 1.4 tpy SO2, and 787.3 tpy NOx

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

11.9 tpy PM10, 1.4 tpy SO2, and 787.3 tpy NOx

1.b.N WEST ROCK, HIGHLAND (Aggregate Pit)

1.b.N.1. Affected Equipment:

A. El-Jay 45" cone crusher
B. El-Jay 5' x 14' 2 deck screen
C. El-Jay 6' x 16' 3 deck horizontal screen
D. Belt Feeder, Dozer Trap 36" x 13'
E. Tunnel Belt 30" x 78'
F. Truss Frame Scale Belt 30" x 78'
G. Kolberg Radial Stacker 24" x 70'
H. Kolman Radial Stacker 24" x 120'
I. Spomac Portable Hopper 24" x 32'
J. Cedar Rapids conveyor 24" x 42'
K. Eagle Sand Screw 44" x 32'
L. Crist conveyor 30" x 60'
M. Dome Manufacturing conveyor 30" x 70'
N. Channel conveyor 20" x 78'

1.b.N.2. Production Limitations:

The following production limits shall not be exceeded without prior approval in accordance with Subsection R307-1-3.1, UACR:

A. 200 tons/hr for both dry and washed product
B. 530,000 tons/yr both dry and washed product
C. 10 hours/day
D. 2000 hours/yr

Aggregate production shall be determined by examination of the records of weigh scale readings which shall be maintained at the plant. The records shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining an operations log.

1.b.N.3. Fugitive Dust Requirements:

A. All unpaved roads and other unpaved operational areas which are used by mobile equipment shall be water sprayed and/or chemically treated to reduce fugitive dust. Control is required during the duration of the project/operation. The application rate of water shall be a minimum of 0.25 gallons per square yard. Application shall be made at least once every two hours during all times the installation is in use unless daily rainfall exceeds .10 of an inch, the road is in a muddy condition, if the road is covered with snow, or if the ambient temperature falls below freezing. If

chemical treatment is to be used, the plan must be approved by the Executive Secretary. Records of water treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:

1. Date
2. Number of treatments made, dilution ratio, and quantity
3. Rainfall received, if any, and approximate amount
4. Time of day treatments were made

Records of treatment shall be made available to the Executive Secretary upon request and shall include a period of two years ending with the date of the request. The haul road length shall not exceed 7000 feet, and the loader operations road shall not exceed 2000 feet without prior approval in accordance with Subsection R307-1-3.1, UACR. The speed of vehicles on the haul road shall not exceed 12 miles per hour, and the speed of vehicles on the loader operations road shall not exceed 8 miles per hour without prior approval in accordance with Subsection R307-1-3.1, UACR.

B. The storage piles shall be watered to minimize generation of fugitive dusts as dry conditions warrant or as determined necessary by the Executive Secretary. The total acreage of the storage piles shall not exceed 8.0 acres.

C. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:

1. All crushers
2. All screens (not just in the wash plant)
3. The sprays shall operate to the extent necessary to keep the equipment operation within the opacity limitations established in IX.H.1.a.B.
4. The moisture content of the aggregate shall be maintained at a value of no less than 4.0 percent by weight. The silt content (minus 200 mesh as determined by ASTM-C-136) of the product shall not exceed 5.0 percent by weight on a daily average without prior approval in accordance with Subsection R307-1-3.1, UACR. The moisture and silt content shall be tested if directed by the Executive Secretary using the appropriate ASTM method.

1.b.N.4. Annual Emissions:

Annual emissions for this source (the entire plant) are hereby established at 33.3 tons/yr for particulate, 13.0 tons/yr for PM_{10}, 0.7 tons/yr for SO_2, and 7.6 tons/yr for NO_x.

1.b.O WEST ROCK, PLEASANT GROVE (Concrete Batch Plant)

All conditions of operation which support the numbers used in the attainment demonstration for the Utah PM10 SIP may be found in the following approval order(s), which is/are incorporated by reference into the Utah SIP.

DAQE-1161-95 (12/18/95) - increased production

Annual emissions estimates for this facility, which have been relied upon in demonstrating attainment and maintenance of the National Ambient Air Quality Standards for PM10, and which may include banked emission credits, are as follows:

10.3 tpy PM10, 3.3 tpy SO2, and 31.1 tpy NOx